



GUAM ENVIRONMENTAL PROTECTION AGENCY

AFHENSIAŇ PRUTEKSION LINA'LA GUAHAN

EDDIE BAZA CALVO
GOVERNOR OF GUAM

RAY TENORIO
LT. GOVERNOR OF GUAM

BLDG. #17-3304 MARINER AVENUE, BARRIGADA, GUAM 96913

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Guam Environmental Protection Agency Board of Directors Meeting Tuesday, December 11, 2018 @ 4:00 pm Main Office Conference Room

Agenda

- I. Call to Order
- II. Approval of Agenda
- III. Approval of November 15, 2018 Minutes
- IV. Administrator's Report
- V. Old Business
 - Navy NOV – Status
 - Tsang Brothers Corp. – Settlement Agreement Status
 - Safe Drinking Water NOV – GWA Status
 - Nova Group, Inc. – Settlement Agreement Status
 - RRF Rules and Regulations Draft Update
- VI. New Business
 - CH2M/JACOBS Update (PIEC)
- VII. Miscellaneous
- VIII. Next Meeting Date/Adjournment

GUAM ENVIRONMENTAL PROTECTION AGENCY

BOARD OF DIRECTORS MEETING

December 11, 2018

ADMINISTRATOR'S REPORT

I. FISCAL YEAR 2019 FINANCIAL REPORT (as of 12/11/2018)

GUAM EPA REVENUES:

A. Federal Grant Funds -	\$1,257,973.62
B. Special Funds (Budget Law Allotted) -	\$1,038,583.48

<u>TOTAL GUAM EPA REVENUES:</u>	\$2,296,557.10
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GUAM EPA OPERATING EXPENSES & O/S ENCUMBRANCES (as of 12/11/2018):

C. Federal Grant Funds -	\$529,896.21
D. Special Funds (Budget Law) -	\$277,830.35

<u>TOTAL GUAM EPA EXPENDITURES & ENCUMBRANCES:</u>	\$807,726.56
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GUAM EPA BALANCE/(DEFICIT):

E. Federal Grant Funds -	\$728,077.41
F. Special Funds (Budget Law) -	\$760,753.13

<u>TOTAL GUAM EPA BALANCE/(DEFICIT):</u>	\$1,488,830.54
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TOTAL GUAM EPA FEDERAL GRANT REIMBURSEMENTS

Total Payment Requests for Reimbursement –	\$ 307,137.58
Pending Approval of Reimbursements -	\$ 0.00

GUAM ENVIRONMENTAL PROTECTION AGENCY

BOARD OF DIRECTORS MEETING

December 11, 2018

ADMINISTRATOR'S REPORT

II. RECYCLING REVOLVING FUND ACCOUNT (as of 12/11/2018)

REVENUES

Recycling Revolving Funds - \$ 2,895,965.00

GUAM EPA OPERATING EXPENSES & O/S ENCUMBRANCES FOR THE RECYCLING FUND (as of 12/11/2018):

A. Personnel -	\$9,108.20
B. Contractual -	\$0.00
C. Equipment, Materials, Supplies, Utilities, etc -	\$0.00
D. Travel -	\$0.00

TOTAL GUAM EPA EXPENDITURES & ENCUMBRANCES: \$9,108.20

TOTAL GUAM EPA BALANCE/(DEFICIT): \$2,886,856.80



AHENSIAN PRUTEKSION LINA'LA GUÅHAN

LOURDES A. LEON GUERRERO, GOVERNOR OF GUAM • JOSHUA E. TENORIO, LIEUTENANT GOVERNOR OF GUAM
WALTER S. LEON GUERRERO, ADMINISTRATOR

MINUTES

- I. **Call to Order:** Chairman Robert Perron called the Board of Director's meeting to order at 4:05 p.m. Present were: Board Members: Robert Perron, Chairman, Terrence Brooks, Vice-Chairman, Steve Hollister, Ann Roth and Steven Carrara. (Florida Sanchez, not present).
Guam EPA Staff: Kristan Finney, Margaret Aguilar, Michelle Lastimoza, Connie Afleje, Brian Bearden, Glenn San Nicolas, Roland Gutierrez, Jesse Cruz and Vilma Balajadia. Guests: Mr. Mike Stoker, Administrator, USEPA Region 9; Mr. Charles Munoz, Senior Advisor, USEPA Region 9; Mr. John McCarroll, Manager, Pacific Islands Office, USEPA Region 9; and Mr. Carl Goldstein, Program Manager, USEPA Region 9.
- II. **Approval of Agenda:** Director Roth made a motion to approve the agenda, seconded by the Chairman. All voted in favor and the motion passed.
- III. **Approval of Minutes:** Vice Chairman made a motion to approve the minutes, seconded by the Director Carrara. All voted in favor and the motion passed.
- IV. **Administrator's Report:** The Administrator introduces the following guests: Mr. Mike Stoker, Administrator, USEPA Region 9; Mr. Charles Munoz, Senior Advisor, USEPA Region 9; Mr. John McCarroll, Manager, USEPA Region 9 Pacific Islands Office; and Mr. Carl Goldstein, Program Manager, USEPA Region 9.

Mr. Mike Stoker stated his top personal priorities: "the Borders; and dealing with the sewage issue with U.S. and Mexico." Among his top priorities in Region 9 is his commitment to the 148 Tribes (tribal reservations) and the Pacific Islands – acknowledging the collaborative efforts made towards the realization of a Public Health Officer and further acknowledged the "good work" of Mr. Brian Bearden, Guam EPA's Chief Engineer. Mr. Stoker provided some insight into USEPA's performance review and "focus of Region 9", specifically, the self-narrative question about "What have they done in over the last year in regards to Borders, the Tribes and the Pacific Islands." Mr. Stoker restated his personal priorities and underscored the success of the "working relationship" due to the leadership from the Board and Mr. Walter Leon Guerrero, Guam EPA Administrator, and the overall staff. Mr. Stoker confirmed his attendance to the Pacific Islands Environmental Conference (PIEC) hosted by Guam EPA from June 24 thru June 27, 2019. Mr. Stoker informed Guam EPA would be receiving an invitation to the Tribal conference held October of next year, possibly held in the Palm Springs area. Mr. Stoker discusses more details.

The Administrator confirmed Mr. Mike Stoker's commitment to building "our home" by "trying to get us whatever he needs to do to get us our land and our building up so that we don't have to have this building and the other building and we can all stay under one roof that doesn't leak." Mr. Stoker shared one of his philosophies: "my office is on the road and that's how I learn about everything." Mr. Stoker reconfirmed the Administrator's previous statement of a new building facility– "I'm going to do everything I can – that's kind of thing you learn when you go out to where the issues are and the people are and the stakeholders are –you deserve better and I am going to do everything I can. I am convinced if I am here 6 years, I will be here at groundbreaking ceremony at a brand new building that we are going to compete with American Samoa." Mr. John McCarroll clarified that American Samoa was the "first building in the entire Pacific to get the elite platinum and the 17th building in the world to get net zero for energy."

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Mr. Stoker further stated the use of modern technology. Mr. Stoker expressed his appreciation by thanking everyone for the “great collaborative team working with Region 9.”

The Administrator received a memo from the incoming Administration regarding Boards and their request that nobody resign. The Administrator stated the incoming Administration “will work in due diligence to address each Board,” noting a legal opinion from the current Administration stating that current Board members, “confirmed by the legislature”, “do not have to turn in a courtesy resignation” – even if they ask you to resign. Resigning from the Board would be “discretionary.”

The Administrator stated that, “unfortunately, Bob (Chairman) and Florida (Board Member), they had their confirmation hearing and I’ve been told by Senator Tom Ada that he does not want to have the confirmation vote for them; and he is going to let it lapse and we are going to have to try and do it again next year...” The Administrator pleaded with those present to reach out and speak with Senator Tom Ada so that the Board would maintain their number above quorum. The Administrator further clarified, “the message I got basically was the 90 days, plus 3 legislative days, equals to about 6 months; so, that we shouldn’t be in jeopardy... one of the big issues of not having a quorum for this Board is that if we wrote a Notice of Violation (NOV) and someone wanted to fight that NOV without a board, we would basically lose the fight.” The Administrator committed to pursuing the confirmation of Board members next year.

The Administrator issues the draft version of “video conferencing” which is something that the AG’s office put together. Ms. Kristan Finney, stated that the Office of the Attorney General explained the “basic draft” which was circulated “around the office” and “modified” by herself. Ms. Finney requested for comments on the draft version so that the “process” can begin. The Administrator further clarified that Ms. Finney, Mr. Rupley and himself met prior to the Board meeting to discuss the draft version of video conferencing. Ms. Finney stated that she put this verbiage together for the Board to review it and approve it. Ms. Finney asked if “the Board is covered by any by-laws?” The Administrator did not have an “answer” stating that Board members may have adopted by-laws, however needed clarification. The Chairman asked Vice-Chairman Brooks if the Board adopted a “Modified Robert’s Rules”? In response, the Vice-Chairman said, “I think we did like the modified Robert’s Rules and it was simplified but I don’t recall ever [adopting].” Director Ann Roth asked if the Board “changed it to allow the change in the number of board members?” The Chairman didn’t think the law established the by-laws. The Vice-Chairman said, “We did discuss what constitutes a quorum and things like that but I don’t think that we’ve formally adopted any by-laws.”

Ms. Finney asked if there was a “set of Rules and Regulations that govern the operation of the board?” The Vice-Chairman said, “No.” The Chairman said, “I think we were passing around some samples of some other Boards’ by-laws really early on in our term under Governor Calvo. I’ll see if we got anything in the computer. I remember we were discussing something –options and we may have not consummated.” The Vice-Chairman stated that the Board by-laws “would’ve have to have gone through a public hearing and submitted to the legislature.” Ms. Finney agreed, further confirming the need for the draft version of “video conferencing” to follow the same process. The Administrator responded, “Okay, so I’ll leave it with the Board on how to proceed with the by-laws or however way it goes.”

The Administrator wanted to comment on Bill No 372-34, which is a measure sponsored by Senator Terlaje relative to the timely publication of all Notices of Defense, Voluntary Compliance Agreements and referrals to the Office of the Attorney General for prosecution by the GEPA and requiring that all Voluntary Compliance Agreements be subject to the final review, approval and amendment by the GEPA Board of Directors.

The Administrator stated that “anything” that has to go through the Agency in this regard has to be approved by the Board. The Administrator wanted to provide comments on some of the verbiage used in the proposed measure further acknowledging the intent of the measure “to prevent favoritism or direct beneficial use” to current or future Administrators of the Agency.

Ms. Finney clarified the two-parts of the Bill– the 1st part would require all Notice of Violations, and possibly all Orders, Notice of Defense, Settlements, and anything to be posted on the Website. This “1st

part” broadens it a little bit and gives it the force of the law. The 2nd part of the measure would need to be addressed due to the verbiage used (i.e. Voluntary Compliance Agreements) to mandate Board approval. Ms. Finney stated that the intention of the 2nd part of the Bill was so that the Board approves Settlement Agreements.

The Administrator clarified to the Board that the Administrator can negotiate Settlement Agreements and is the “final negotiator for costs.” The Administrator further explained, “What I’ve done is use the Matrix provided by the program that is issuing the Notice of Violation, which is by law, following certain conditions and stipulations. For instance: first offence; severity of the violation; and just a couple other factors that you have to or issues that you have to factor in and that in itself could be the cause of the decrease of the fine, and even at that I’ve been advised I can still lower it which is where work in government can create a ‘talking with the inspector general’ officers from EPA.” The administrator shared his experience with an investigation on Guam EPA for similar violations and how following the Matrix, and to not “deter from the Matrix by more than 10 percent,” which is policy the administrator has followed in practice.

Ms. Finney responded, “of course there is lots of reasons why you might want to settle or whatever but it wouldn’t be inappropriate for a settlement agreement to go to the Board for approval if that’s what how they wanted to do that – put that into the statute – as far as the VCA (Voluntary Compliance Agreements), there is only one program that actually has that in its law and that’s Pesticides; and if Voluntary Compliance Agreement sort of comes in without the respondent filing any kind of response or anything – so I’m not sure if that was what was intended to go before you guys (Board) – but as far as the settlement agreement it doesn’t seem like that would be an inappropriate thing to require to come to the Board for approval it just not that way now.”

The Administrator agreed and acknowledged the Board’s decision-making Authority over the Agency. The Administrator suggested, then “recommended” the Board provide comments on the proposed measure (Bill 372-34) addressing the verbiage changes. The Administrator restated that the Agency, including himself, had no problems having the Board review and provide a “stamp of approval on settlement agreements.” The Administrator stated that he would need a response from the Board so that he can have his team prepare his testimony. Ms. Finney confirmed her attendance at the public hearing for the proposed measure.

V. Old Business:

- *Navy NOV – Notice to Appeal*

Ms. Kristan Finney stated that the files are with her to get the final documents.

Director Roth inquired about the “Navy Settlement.” The Administrator clarified that the Notice of Violation (NOV) issued to the Navy is “basically the same” NOV that was issued to Nova Group, Inc. (NOVA). In response to Director Roth’s inquiry, the Administrator said, “the idea behind giving the Navy the NOV as the owners and the oversight for the contractors is that we weren’t looking to get double the fine for this same issue. Ours was just to tell the Navy your contractor messed up the previous violations even though the amount of contamination and pollution that hit the ground was relatively minor– 150 gallons of jet fuel sounds like a lot but they actually did about a million dollars’ worth of cleanup which way exceeds the 150 gallons what the contractor did.”

The Administrator expanded on the Navy’s organizational chart having the following: construction managers; construction inspectors; and other measures that are put in place to ensure that contractors do not “get away” with any violations in a six months span such is the case with the “Pipeline” and NOVA. The Administrator stated that the NOV issued is “telling the Navy” that “we are watching now” and that “future NOV’s” will be accompanied with Fines to the Navy and the contractor.

The Vice-Chairman asked if both NOV’s should be combined. In response, the Administrator agreed to working on and talking about combining both NOV’s, however reassured the Board that the parties involved have been informed. In response to making “changes”, the Administrator said, “we are not

changing it and they have acknowledge it so all it is we are going to respond to them in a letter saying: we agree to your agreement on our NOV and we will move forward..." The Administrator briefly discussed a passing conversation with the Admiral's legal counsel, Captain Turner, who asked the Administrator "what liability does the Navy have if the contractor is the one at fault?" In response, the Administrator said, "the way we do it on Guam EPA is you have total oversight of your contractor, but what your contractor's faults are what the Navy's faults are and he somewhat disagrees with that... so that's where we are at with this."

- *Tsang Brothers Corporation Tentative Settlement Agreement.*

Mr. Roland Gutierrez stated that the settlement was done and all they are trying to do is set up a photo op. Director Roth asked that the Tsang Brothers be removed from Old Business. The Administrator stated yes –everything is settled and it could be removed.

- *Safe Drinking Water NOV/ Guam Waterworks Authority (GWA).*

The Chairman stated that the Safe Drinking Water NOV is pretty much put to bed as well. Ms. Kristan Finney stated that the file is with her to get the final documents. Ms. Finney as she stated earlier –she is trying to just get that finalized. The Administrator stated to finalize the letter agreed to what we've already discussed with GWA.

- *Nova Group, Inc. – Settlement Agreement Status.*

The Chairman stated that NOVA was already discussed.

- *RRF Rules and Regulations Draft – Update*

Mr. Roland Gutierrez stated that there is a Public Hearing next week Wednesday, December 19, 2018 at 5:00 p.m. here at the conference as part of the Triple A process and once that is done I guess they will put out the answers to the comments and then from then on I believe I don't know what process if you guys approved it already –The Administrator: No, after the public comment period –Roland: then it will go to you (board) and if its approved by you and by the legal counsel then the next step I believe is the legislature.

VI. New Business:

Brief from CH2M/Jacobs Re Current Projects – The Administrator stated that unfortunately Mrs. Conchita Taitano is off-island and that it should have been removed from the agenda in the beginning and apologized. Mr. Roland Gutierrez stated that Mrs. Taitano was going to do the presentation on Thursday, December 13, 2018, however the meeting was moved up.

VII. Miscellaneous: *Triennial Review of Water Quality Standards*

Mrs. Margaret Aguilar stated that she provided copies of the Public Notice that she recently put in circulation with the Guam Daily Post –beginning early November 2018. This is a very important mandate by the Clean Water Act as far as getting public involvement to bring the process called a "Triennial Review and Water Quality Standards." Mrs. Aguilar further stated, "The Water Quality Standards Act was enacted back in 2015 when there was a change in the recreational water requirement... and here we are needing to [go] back and really take a look at the Water Quality Standards which is the foundation for the Water Pollution Program that's mandated by the Clean Water Act..." The standards provide criteria for the different categories of water identified for Guam, which is: the ground water; the marine water; and the surface water, which is the rivers and streams. There are criteria in our water quality standards that say this is the threshold for the water to "be the pollution." Anything beyond this threshold causes a problem for the aquatic life.

Mrs. Aguilar is asking the public to take a look at this –especially our technical partners that is the Navy and some of our other partners who really have an investment in making sure that they follow the water quality standards. In addition to the criteria, there is a criteria as far as what to do when there is discharges to the water – we have permits so they have to follow those particular criteria for discharges.

Mrs. Aguilar stated that a meeting is scheduled as noted in that Public Notice for a public meeting in January 15, 2019, so, anyone who wants to turn in any comments will have up until the end of December 20, 2018, to turn in those comments/recommendations or anything. Mrs. Aguilar said that USEPA's standpoint is that "every so often when the Triennial Review is undertaken, we have to take a look at your (Boards) recommendations; the public's recommendations with regards to pollutants and ask us to take a look at and adopt those criteria's..." for Guam.

Mr. Jesse Cruz stated that basic Water Quality Standards "is just a book of numbers that are threshold numbers for different contaminants; constituents; chemicals and anytime we collect water samples we can pair it against those numbers. So if the numbers are above it, then it is a violation and if it is below it they're not – discharges have to meet those numbers if they want to be like GWA that's one of the main regulators for us -if they wanted to do the outfall for nitrate they have to follow our nitrate standards..."

Mr. Jesse Cruz stated that the Water Quality Standards hasn't been updated in a while it should be updated every three-years, with the last approval in 2001. The recreational beach standard, which was recently approved and passed by the legislature, reinforces the fact that public involvement is critical. Mr. Cruz and others are working towards a draft Water Quality Standards revised and will come before the Board for approval on any revisions. Mr. Cruz reconfirmed the January 2019 public meeting inviting everyone to "come in and share with us what they think". Mr. Cruz mentioned the two metals –Copper and Nickel –stating that "GWA and the Navy did a coast study for their NPDES permit renewal a year or two ago and they found out that the number which we promulgated from USEPA was too low for Guam and it was hard for them to meet because of our volcanic soils and so they did this whole study to verify that numbers are too low. So they have created and generated a Guam specific number for that and so it's going to be adopted on Guam, a specific one that is more appropriate to our discharges here.

The Administrator stated, "I do want to add, since we are talking about standards and regulations –I was just handed this week our Safe Drinking Water Statutes which we have been working on..." The Administrator stated that once he finishes reading it and signs it –he plans to hand the Safe Drinking Water Statutes to Mr. John McCarroll for review. Once completed, the Administrator stated that he will present it to the Board or through the process and submit it to the AG's office, legislature and the Governor's office. Ms. Finney chimed in stating that the Safe Drinking Water Statutes only has to go to the Legislature.

The Administrator further stated, "This will be the first time that we amended our Drinking Water statutes... Ms. Finney, Mr. Bearden and the Safe Drinking Water Staff and about four or five other programs that have their statutes within that Safe Drinking Water Statutes. It's rather important because it's not just one program that's being affected, you are going to have four or five different programs affected by this upgrade and I'm ecstatic about it." Mr. Jesse Cruz stated that it is going to give the Agency the authority to start charging fees and updating its fee schedule. This authorization will help the Agency generate fees and hopefully down the line the Agency will be self-sufficient – charging appropriate fees and not just random fees.

Notice of Violations (NOV's)

Director Roth "Can I ask a question? I remember a while ago Mr. Nic Lee said that they were going to put all the NOV's on the website and I haven't checked. I know Senator Terlaje. I saw her on T.V. last week and she was going on about it. Is it now posted on –the settlements and the status? Administrator: "No, not yet." Director Roth: "Nic said it would be done by October." Ms. Finney stated that there haven't been NOV's issued as far as she knows that have not appeared on the website. It's not like this agency is issuing out all these NOV's and not posting them. The Administrator stated that "if you recommend and want to put it on, we can easily do that –I mean the media has it already so it's not like we are hiding anything –we've had multiple media outlets requesting for all our NOV's and we've provided that. The Administrator stated that "we will put all the current ongoing NOV's up." The Administrator and Director Roth discusses more details.

(A copy of reports that were issued is available with the Board Secretary upon appointment).

VIII. Next Meeting Date/Adjournment

The Chairman stated that the next regular board meeting date and time will be on Thursday, the 17th of January 2019 at 4:00 pm.

Director Roth made a motion to adjourn the meeting, seconded by Vice Chairman. The meeting was adjourned at 5:05 p.m.


Vilma Balajadia



GUAM ENVIRONMENTAL PROTECTION AGENCY

AHENSIAŃ PRUTEKSIOŃ LINA'LA GUAHAN

REQUEST FOR PUBLIC INVOLVEMENT TRIENNIAL REVIEW OF GUAM WATER QUALITY STANDARDS

The Guam Environmental Protection Agency (Guam EPA) is requesting public involvement from the local community and other interested parties during the upcoming **triennial review** of Guam's Water Quality Standards (WQS) regulation in accordance with Clean Water Act (CWA) Section 303(c).

Section 303(c)(1) of the CWA and the EPA's implementing regulations at 40CFR 131.20 require that Guam, from time to time, *but at least once every three years*, hold public hearings to review applicable WQS and, as appropriate, modify and adopt WQS. In each WQS triennial review cycle, states and tribes, with input from the public, review their existing WQS to identify additions and/or revisions that are necessary or appropriate to ensure that their WQS meet the requirements of the CWA and the needs of the state or tribe.

Guam EPA intends to revise the island's WQS in a variety of ways including additions of and revisions to water quality criteria, adopted implementation procedures, or other general policies. The public is highly encouraged to read the **Water Quality Standards Regulatory Revisions Final Rule** published in 2015 which addresses 6 key program areas. Here is a link to the revision: <https://www.epa.gov/wqs-tech/final-rulemaking-update-national-water-quality-standards-regulation>. The Guam WQS, Guam EPA's general list of triennial review topics, and other pertinent review cycle references, can be accessed at www.EPA.guam.gov.

WHERE TO SUBMIT RECOMMENDATIONS

Mail or Hand Delivery: **Triennial Review Recommendations**
Attn: Guam EPA EMAS Administrator
3304 Mariner Avenue, Building 17
Tiyen, Barrigada, Guam 96913

Deadline: Postmarked by December 28, 2018

E-mail: jesse.cruz@epa.guam.gov
cc: margaret.aguilar@epa.guam.gov

Subject: 2019 GWQS Triennial Review

Deadline: COB, December 28, 2018

PUBLIC MEETING SCHEDULE

DATE:	TUESDAY, JANUARY 15, 2019
TIME:	5:30 - 6:30 P.M.
PLACE:	GUAM EPA MAIN OFFICE CONFERENCE ROOM

Email inquiries to margaret.aguilar@epa.guam.gov or call telephone number 300-4787.

**Supplemental Information for
Water Quality Standards Regulatory Revisions Final Rule**

**New or Updated CWA Section 304(a) Criteria Recommendations
Published since May 30, 2000**

NOTE: The EPA's final rule revision at § 131.20(a) requires that if states and authorized tribes choose not to adopt new or revised criteria during their triennial review for any parameters for which EPA has published new or updated criteria recommendations under CWA section 304(a), they must explain their decision when reporting the results of their triennial review to EPA under CWA section 303(c)(1) and 40 CFR 131.20(c).

When states and authorized tribes conduct their next triennial review, they must provide an explanation for why they did not adopt new or revised criteria for parameters for which EPA has published new or updated CWA section 304(a) criteria recommendations since May 30, 2000. During the triennial reviews that follow, states and authorized tribes must do the same for criteria for parameters for which EPA has published CWA section 304(a) criteria recommendations since the states' or authorized tribes' most recent triennial review.

This document provides a list of the new or updated CWA section 304(a) criteria recommendations that have been published since May 30, 2000. This document does not represent the entirety of CWA section 304(a) criteria recommendations. For a complete list, see: <http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm>.

Aquatic Life Criteria Table

Pollutant	CAS Number	P/NP*	Freshwater		Saltwater		Publication Year
			CMC ** (acute) (µg/L)	CCC ** (chronic) (µg/L)	CMC ** (acute) (µg/L)	CCC ** (chronic) (µg/L)	
Acrolein	107028	P	3	3			2009
Ammonia	7664417	NP	Freshwater Ammonia Criteria are pH, Temperature and Life-stage Dependent				2013
Carbaryl	63252	NP	2.1	2.1	1.6		2012
Cadmium	7440439	P	2.0 A, B	0.25 A, B	40 A	8.8 A	2001
Copper	7440508	P	Freshwater criteria calculated using the Biotic Ligand Model		4.8 A, C	3.1 A, C	2007
Diazinon	333415	NP	0.17	0.17	0.82	0.82	2005
Nonylphenol	84852153	NP	28	6.6	7	1.7	2005

New/Updated CWA 304(a) Criteria Recommendations Published since May 30, 2000

Nutrients	—	NP	See EPA's Ecoregional criteria for Total Phosphorus, Total Nitrogen, Chlorophyll <i>a</i> and Water Clarity (Secchi depth for lakes; turbidity for streams and rivers) (& Level III Ecoregional criteria)					2003
Tributyltin (TBT)	—	NP	0.46	0.072	0.42	0.0074		2004

*P/NP – Indicates either a Priority Pollutant (P) or a Non Priority Pollutant (NP).

****Criteria Maximum Concentration and Criterion Continuous Concentration**

The Criteria Maximum Concentration (CMC) is an estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The Criterion Continuous Concentration (CCC) is an estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed indefinitely without resulting in an unacceptable effect. The CMC and CCC are just two of the six parts of an aquatic life criterion; the other four parts are the acute averaging period, chronic averaging period, acute frequency of allowed exceedence, and chronic frequency of allowed exceedence. Because CWA section 304(a) aquatic life criteria are national guidance, they are intended to be protective of the vast majority of the aquatic communities in the United States.

A Freshwater and saltwater criteria for metals are expressed in terms of the dissolved metal in the water column. See "[Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria \(PDF\)](#)," (49 pp, 3MB) October 1, 1993, by Martha G. Prothro, Acting Assistant Administrator for Water, available on [NSCEP's web site](#) and 40 CFR 131.36(b)(1). Conversion Factors applied in the table can be found in Appendix A to the Preamble—Conversion Factors for Dissolved Metals.

B The freshwater criterion for this metal is expressed as a function of hardness (mg/L) in the water column. The value given here corresponds to a hardness of 100 mg/L. Criteria values for other hardness may be calculated per the equation presented in the criteria document.

C For the saltwater copper criteria, when the concentration of dissolved organic carbon is elevated, copper is substantially less toxic and use of Water-Effect Ratios might be appropriate.

Human Health Criteria Table

Pollutant	CAS Number	P/NP*	Human Health for the consumption of		Publication Year
			Water + Organism (µg/L)	Organism Only (µg/L)	
Acenaphthene	83329	P	70 A	90 A	2015
Acrolein	107028	P	3	400	2015
Acrylonitrile	107131	P	0.061 C	7.0 C	2015
Aldrin	309002	P	0.00000077 C	0.00000077 C	2015
alpha-Hexachlorocyclohexane (HCH)	319846	P	0.00036 C	0.00039 C	2015
alpha-Endosulfan	959988	P	20	30	2015
Anthracene	120127	P	300	400	2015
Antimony	7440360	P	5.6 B, D	640 B, D	2002
Benzene	71432	P	0.58–2.1 C, D	16–58 C, D	2015
Benzidine	92875	P	0.00014 C	0.011 C	2015
Benzo(a)anthracene	56553	P	0.0012 C	0.0013 C	2015
Benzo(a)pyrene	50328	P	0.00012 C, D	0.00013 C, D	2015
Benzo(b)fluoranthene	205992	P	0.0012 C	0.0013 C	2015
Benzo(k)fluoranthene	207089	P	0.012 C	0.013 C	2015

July 2015

EPA-820-B-15-002

New/Updated CWA 304(a) Criteria Recommendations Published since May 30, 2000

beta-Hexachlorocyclohexane (HCH)	319857	P	0.0080 C	0.014 C	2015
beta-Endosulfan	33213659	P	20	40	2015
Bis(2-Chloro-1-methylethyl) Ether	108601	P	200	4,000	2015
Bis(2-Chloroethyl) Ether	111444	P	0.030 C	2.2 C	2015
Bis(2-Ethylhexyl) Phthalate	117817	P	0.32 C, D	0.37 C, D	2015
Bis(Chloromethyl) Ether	542881	NP	0.00015 C	0.017 C	2015
Bromoform	75252	P	7.0 C, D	120 C, D	2015
Butylbenzyl Phthalate	85687	P	0.10 C	0.10 C	2015
Carbon Tetrachloride	56235	P	0.4 C, D	5 C, D	2015
Chlordane	57749	P	0.00031 C, D	0.00032 C, D	2015
Chlorobenzene	108907	P	100 A, D	800 A, D	2015
Chlorodibromomethane	124481	P	0.80 C, D	21 C, D	2015
Chloroform	67663	P	60 D	2,000 D	2015
Chlorophenoxy Herbicide (2,4-D)	94757	NP	1,300 D	12,000 D	2015
Chlorophenoxy Herbicide (2,4,5-TP) [Silvex]	93721	NP	100 D	400 D	2015
Chrysene	218019	P	0.12 C, D	0.13 C, D	2015
Cyanide	57125	P	4 D	400 D	2015
Dibenzo(a,h)anthracene	53703	P	0.00012 C	0.00013 C	2015
Dichlorobromomethane	75274	P	0.95 C, D	27 C, D	2015

July 2015

EPA-820-B-15-002

New/Updated CWA 304(a) Criteria Recommendations Published since May 30, 2000

Diieldrin	60571	P	0.0000012 C	0.0000012 C	2015
Diethyl Phthalate	84662	P	600	600	2015
Dimethyl Phthalate	131113	P	2,000	2,000	2015
Di-n-Butyl Phthalate	84742	P	20	30	2015
Dinitrophenols	25550587	NP	10	1,000	2015
Endosulfan Sulfate	1031078	P	20	40	2015
Endrin	72208	P	0.03 D	0.03 D	2015
Endrin Aldehyde	7421934	P	1	1	2015
Ethylbenzene	100414	P	68 D	130 D	2015
Fluoranthene	206440	P	20	20	2015
Fluorene	86737	P	50	70	2015
gamma-Hexachlorocyclohexane (HCH) [Lindane]	58899	P	4.2 D	4.4 D	2015
Heptachlor	76448	P	0.0000059 C, D	0.0000059 C, D	2015
Heptachlor Epoxide	1024573	P	0.000032 C, D	0.000032 C, D	2015
Hexachlorobenzene	118741	P	0.000079 C, D	0.000079 C, D	2015
Hexachlorobutadiene	87683	P	0.01 C, D	0.01 C, D	2015
Hexachlorocyclohexane (HCH) – Technical	608731	NP	0.0066 C	0.010 C	2015
Hexachlorocyclopentadiene	77474	P	4 A, D	4 A, D	2015
Hexachloroethane	67721	P	0.1 C	0.1 C	2015
Indeno(1,2,3-cd)pyrene	193395	P	0.0012 C	0.0013 C	2015
Isophorone	78591	P	34 C	1,800 C	2015

July 2015

EPA-820-B-15-002

New/Updated CWA 304(a) Criteria Recommendations Published since May 30, 2000

Methylmercury	22967926	P		0.3 mg/kg E	2001
Methoxychlor	72435	NP	0.02 D	0.02 D	2015
Methyl Bromide	74839	P	100	10,000	2015
Methylene Chloride	75092	P	20 C, D	1,000 C, D	2015
Nitrobenzene	98953	P	10 A	600 A	2015
Nitrosodibutylamine, N	924163	NP	0.0063 C	0.22 C	2002
Nitrosodiethylamine, N	55185	NP	0.0008 C	1.24 C	2002
Nitrosopyrrolidine, N	930552	NP	0.016 C	34 C	2002
N-Nitrosodimethylamine	62759	P	0.00069 C	3.0 C	2002
N-Nitrosodi-n-Propylamine	621647	P	0.0050 C	0.51 C	2002
N-Nitrosodiphenylamine	86306	P	3.3 C	6.0 C	2002
Pathogen and Pathogen Indicators	—		See EPA's 2012 Recreational Water Quality Criteria		2012
Pentachlorobenzene	608935	NP	0.1	0.1	2015
Pentachlorophenol	87865	P	0.03 A, C, D	0.04 A, C, D	2015
Phenol	108952	P	4,000 A	300,000 A	2015
Polychlorinated Biphenyls (PCBs)		P	0.000064 C, D, F	0.000064 C, D, F	2002
Pyrene	129000	P	20	30	2015
Selenium	7782492	P	170 D	4200 D	2002
Tetrachloroethylene	127184	P	10 C, D	29 C, D	2015
Thallium	7440280	P	0.24 D	0.47 D	2003
Toluene	108883	P	57 D	520 D	2015

July 2015

EPA-820-B-15-002

New/Updated CWA 304(a) Criteria Recommendations Published since May 30, 2000

Toxaphene	8001352	P	0.00070 C, D	0.00071 C, D	2015
Trichloroethylene	79016	P	0.6 C, D	7 C, D	2015
Vinyl Chloride	75014	P	0.022 C, D	1.6 C, D	2015
Zinc	7440666	P	7,400 A	26,000 A	2002
1,1,1-Trichloroethane	71556	P	10,000 D	200,000 D	2015
1,1,2,2-Tetrachloroethane	79345	P	0.2 C	3 C	2015
1,1,2-Trichloroethane	79005	P	0.55 C, D	8.9 C, D	2015
1,1-Dichloroethylene	75354	P	300 D	20,000 D	2015
1,2,4,5-Tetrachlorobenzene	95943	NP	0.03	0.03	2015
1,2,4-Trichlorobenzene	120821	P	0.071 D	0.076 D	2015
1,2-Dichlorobenzene	95501	P	1,000 D	3,000 D	2015
1,2-Dichloroethane	107062	P	9.9 C, D	650 C, D	2015
1,2-Dichloropropane	78875	P	0.90 C, D	31 C, D	2015
1,2-Diphenylhydrazine	122667	P	0.03 C	0.2 C	2015
Trans-1,2-Dichloroethylene	156605	P	100 D	4,000 D	2015
1,3-Dichlorobenzene	541731	P	7	10	2015
1,3-Dichloropropene	542756	P	0.27 C	12 C	2015
1,4-Dichlorobenzene	106467	P	300 D	900 D	2015
2,3,7,8-TCDD (Dioxin)	1746016	P	5.0E-9 C, D	5.1E-9 C, D	2002
2,4,5-Trichlorophenol	95954	NP	300 A	600 A	2015
2,4,6-Trichlorophenol	88062	P	1.5 A, C	2.8 A, C	2015
2,4-Dichlorophenol	120832	P	10 A	60 A	2015

July 2015

EPA-820-B-15-002

New/Updated CWA 304(a) Criteria Recommendations Published since May 30, 2000

2,4-Dimethylphenol	105679	P	100 A	3,000 A	2015
2,4-Dinitrophenol	51285	P	10	300	2015
2,4-Dinitrotoluene	121142	P	0.049 C	1.7 C	2015
2-Chloronaphthalene	91587	P	800	1,000	2015
2-Chlorophenol	95578	P	30 A	800 A	2015
2-Methyl-4,6-Dinitrophenol	534521	P	2	30	2015
3,3'-Dichlorobenzidine	91941	P	0.049 C	0.15 C	2015
3-Methyl-4-Chlorophenol	59507	P	500 A	2,000 A	2015
p,p'-Dichlorodiphenyldichloroethane (DDD)	72548	P	0.00012 C	0.00012 C	2015
p,p'-Dichlorodiphenyldichloroethylene (DDE)	72559	P	0.000018 C	0.000018 C	2015
p,p'-Dichlorodiphenyltrichloroethane (DDT)	50293	P	0.000030 C	0.000030 C	2015

*P/NP - Indicates either a Priority Pollutant (P) or a Non Priority Pollutant (NP).

A This chemical has a criterion for organoleptic (taste and odor) effects. In some cases, the organoleptic criterion may be more stringent.

B This criterion was revised to reflect EPA's q1* or RfD as contained in the Integrated Risk Information System (IRIS) as of May 17, 2002. The fish tissue bioconcentration factor (BCF) is from the 1980 Ambient Water Quality Criteria document.

C This criterion is based on carcinogenicity of 10⁻⁶ risk.

D EPA has issued a Maximum Contaminant Level (MCL) for this chemical under the Safe Drinking Water Act. In some cases, the MCL may be more stringent. For more information see [EPA's National Primary Drinking Water Regulations](#).

July 2015

EPA-820-B-15-002

New/Updated CWA 304(a) Criteria Recommendations Published since May 30, 2000

E This fish tissue residue criterion for methylmercury is based on a total fish consumption rate of 0.0175 kg/day.

F This criterion applies to total PCBs (e.g., the sum of all congener or all isomer or homolog or Aroclor analyses).

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July 2015

EPA-820-B-15-002

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ELECTRONIC MEETINGS AND COMMUNICATIONS

§ _____. MEETING ATTENDANCE BY VIDEOCONFERENCE.

- a. The Board recognizes the responsibility of board members to make every effort to attend meetings in person, but from time to time events may prohibit personal attendance. Under exceptional circumstances, a board member may participate in a meeting of the Board by videoconference *provided* that all persons participating in the meeting are able to hear one another and the provisions of the Open Government Law concerning public access to the meeting are observed. Participation in a board meeting by video conferencing constitutes presence in person at the meeting.
- b. Meetings may not be chaired by videoconference.
- c. Executive sessions and due process hearings shall not be conducted via videoconference.
- d. A board member who wishes to participate in a Board meeting by means of video conferencing shall submit a written request by electronic email to the Chair at least 48 hours in advance of the meeting, and a copy of the request shall be attached to the minutes of the meeting. The board member's location and means of attendance shall be noted on the agenda and recorded in the minutes.
- e. Voting at a meeting where at least one board member is participating by video conferencing shall be by roll call only.
- f. New board members must attend at least two board meetings in person before attending a meeting via videoconference.
- g. The Chair may cause or direct the temporary disconnection or muting of a member's connection if it is causing undue interference with the meeting, and the Chair's decision to do so shall be recorded in the minutes. In the event it is determined by the Chair that either the absent board member or the board members in attendance cannot be heard by one another, the video conference shall be terminated, and the absent board member shall not be permitted to vote, nor continue to be counted toward a quorum.